12CX6

12CX6

SHARP-CUTOFF PENTODE

7-PIN MINIATURE TYPE

For use in automobile radio receivers operating directly from 12-volt storage batteries

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage range.	10 to 15.9	dc volts
This voltage range is on an absolute basis. For longest life, it is recommended that the heater be operated within the voltage range of 11 to 14 volts.		
Current (Approx.) at 12.6 volts. . . .	0.15	amp

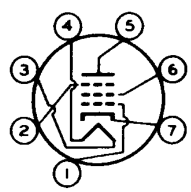
Direct Interelectrode Capacitances:°

Grid No.1 to plate	0.05 max.	μμf
Grid No.1 to cathode, grid No.3, grid No.2, and heater.	7.6	μμf
Plate to cathode, grid No.3, grid No.2, and heater.	6.2	μμf

Mechanical:

Operating Position	Any
Maximum Overall Length	2-1/8"
Maximum Seated Length.	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip). .	1-1/2" ± 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline.	*See General Section*
Bulb	T5-1/2
Base . . . . . . Small-Button Miniature 7-Pin	(JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW	7BK

Pin 1 - Grid No.1
Pin 2 - Grid No.3
Pin 3 - Heater
Pin 4 - Heater



Pin 5 - Plate
Pin 6 - Grid No.2
Pin 7 - Cathode

AMPLIFIER — Class A_1

Maximum Ratings, *Design-Maximum Values:*

PLATE VOLTAGE.	33 max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE.	33 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Positive-bias value.	0 max.	volts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	30 max.	volts
Heater positive with respect to cathode.	30 max.	volts

Characteristics:

Heater Voltage	12.6	volts
Plate Voltage.	12.6	volts

° Without external shield.

12CX6

SHARP-CUTOFF PENTODE

Grid-No.3 (Suppressor-Grid) Voltage . . .	0	volts
Grid-No.2 Voltage	12.6	volts
Grid-No.1 Supply Voltage.	0	volts
Grid-No.1 Resistor (Bypassed)	2.2	megohms
Plate Resistance (Approx.).	40000	ohms
Transconductance.	3100	μmhos
Plate Current	3	ma
Grid-No.2 Current	1.4	ma
Grid-No.1 Voltage (Approx.) for plate μa = 10	-4.5	volts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance.	10 max.	megohms